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REMARKS

Claims 2-11 and 13-38 are pending. Claims 9, 10, 15, 19, and 20 (all of the independent claims), have been amended to specify that the network device is a physical layer network device. Other parts of claims 15, 19, and 20 have been amended for clarification, without intended change in scope.

Premature Finality

In the previous Reply, the claims were amended without change in scope, to render moot objections, and to put into allowable form the subject matter indicated by the Examiner as allowable. As such, the new grounds of rejection in the present Action were not necessitated by the amendments. Therefore the indicated finality of the Action is premature, and should be withdrawn.

Prior Art Rejections

Claims 2-11 and 13-38 stand rejected under 35 USC 103(a) as obvious over Sambamurthy et al., U.S. Patent No. 6,108,713 ("Sambamurthy"), in view of Bray, U.S. Patent No. 6,529,961 ("Bray"). Withdrawal of the rejections is respectfully requested for at least the following reasons.

Sambamurthy discloses a media access controller (MAC) 150 that interfaces with a network data system bus 101 from which both data and control information are both simultaneously passed. Col. 7, line 53 - col. 8, line 6; Fig. 2. As noted in the Action, Sambamurthy does not disclose sending information by at least four pins of a data bus. In addition, Sambamurthy does not disclose communication with a physical layer device (PHY) via a data bus.

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Bray discloses a PHY transceiver 16 that has a four-pin TXD and a four-pin RXD for 4-bit transmitting and receiving of data. Col. 3, lines 42-50. Bray does not disclose using the four-pin TXD and the four-pin RXD for conveying control information as part of a testing operation.

Claim 9 as amended recites a method of testing a physical layer network device, wherein the method includes, *inter alia*, sending control information via an MII at a data rate greater than 2.5 Mb/sec, wherein the control information is sent via at least four pins of a data bus. Neither Sambamurthy nor Bray teach or suggest the recited method at least because neither reference teaches or suggests sending control information to a physical layer device (PHY) via a data bus. Sambamurthy does disclose sending simultaneous data and control information to a MAC from a higher-level network device. However, Sambamurthy draws a clear distinction between MAC devices and PHY devices. Col. 1, line 59 - col. 2, line 22; Fig. 1A. Sambamurthy's MAC is not a PHY, and nothing about Sambamurthy's device suggests sending control information to a PHY via a data bus to improve speed of testing. Rather Sambamurthy's main purpose for sending data and control information simultaneously appears to be provide the ability to change processing parameters within a MAC even while a packet is being processed. Col. 8, lines 3-6.

While Bray does disclose the standard four-pin data bus of a PHY, Bray does not discuss testing or provide even the slightest suggestion of sending control information across the four-pin transmit and receive buses. Thus nothing in Sambamurthy or Bray teaches or suggests sending control information across a data bus of a physical layer (PHY) device. Moreover, nothing in Sambamurthy or Bray suggests that the asserted advantage of Sambamurthy's simultaneous sending of data and control information (ability to change processing parameters while a packet is being processed) would be applicable to PHY devices in general or to Bray's PHY device in particular. Since

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Sambamurthy and Bray do not teach or suggest all of the features of claim 9 as amended, claims 2-9 and 11 are patentable over Sambamurthy and Bray.

Claim 10 as amended recites a method of testing a physical layer network device, wherein the method includes, *inter alia*, sending control information via an MII at a data rate greater than 2.5 Mb/sec, wherein the sending the control information includes sending the information in nibbles of at least four bits. As discussed above, Sambamurthy and Bray do not teach or suggest sending control information to a physical layer device across a four-pin data bus. Similarly, Sambamurthy and Bray do not teach or suggest sending control information to a PHY in nibbles of at least four bits. Since Sambamurthy and Bray do not teach or suggest all of the recited features of claim 10 as amended, claims 10 and 21-28 are patentable over Sambamurthy and Bray.

Claim 15 as amended recites a method of testing a physical layer network device, wherein the method includes passing information (including control information) from a tester to the PHY device via at least four pins of a media independent interface (MII). The MII is discussed in the application as an interface between the PHY and the MAC, downstream of the MAC (toward the network physical medium) and upstream of the PHY. Page 1, lines 23-28. The network data bus 101 of Sambamurthy's MAC 150 is not an MII between a MAC and a PHY, but rather is upstream of the MAC, higher on the OSI layered model shown in Fig. 1A of Sambamurthy. Thus Sambamurthy does not disclose passing control information along pins of MII, in addition to not disclosing passing control information to a PHY device. Bray does not teach or suggest passing control information to a PHY device, via the pins of an MII. Therefore Sambamurthy and Bray do not teach or suggest all of the recited features of claim 15 as amended, and thus claims 13-18 are patentable over Sambamurthy and Bray.

Claim 19 as amended recites a method of testing a physical layer network device, wherein the method includes passing information (including control information) from a tester to the PHY device via a media independent interface (MII), in nibbles of at

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least four bits. From the above discussion regarding passing of control information to a PHY device (claim 9), passing information in nibbles of four bits (claim 10), and passing information through an MII (claim 15), it is clear that Sambamurthy and Bray do not teach or suggest all of the recited features of claim 19 as amended. Therefore claims 19 and 29-33 are patentable over Sambamurthy and Bray.

Claim 20 as amended recites a method of testing a physical layer network device, wherein the method includes passing information (including control information) from a tester to the PHY device via a media independent interface (MI); using the control information to perform operations in the network device; and placing the network device in a test mode prior to passing the control information to the network device. As discussed above with regard to claim 15, Sambamurthy does not teach or suggest passing control information to a PHY device. Bray also does not teach or suggest this. Therefore Sambamurthy does teach or suggest all of the features of claim 20 as amended, and claims 20 and 34-38 are patentable over Sambamurthy and Bray.

Conclusion

For at least the foregoing reasons, withdrawal of the rejections of the claims is respectfully requested, in which event this application would be in condition for allowance. Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

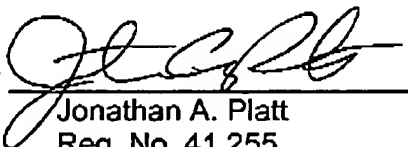
No fee is believed due with the filing of this Reply. In the event any fees are due in connection with the filing of this paper, the Commissioner is authorized to charge

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those fees to Deposit Account No. 18-0988 (Charge No. AMDSP0353US).

Respectfully submitted,
RENNER, OTTO, BOISSELLE & SKLAR, LLP

By 
Jonathan A. Platt
Reg. No. 41,255

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113
(216) 621-6165 (fax)

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